

## Science Fair Academy 2020-2021

Dear Teachers,

We are so excited for the second year of Science Fair Academy! If you are unsure on how to approach our partnership, here are some pointers and advice to help your classroom run smoothly.

- Meetings will be bi-weekly, lasting 60 minutes, and must be overseen by at least one teacher at all times
  - Additional meeting times can be created on a need basis.
  - Virtual meeting times may be altered to be shorter than 60 minutes

### The First Few Meetings

The first few meetings between mentors and mentees can be a bit overwhelming, to help combat this here are some tips:

- Request that mentors sit at a random table of their choice, use a student selection method (popsicle sticks, roster, students that are partnered, etc) to assign your students to an initial mentor.
- **Virtually: Eleanor Meinhold, our President will work with you to assign mentors with mentees, this way they can be put into breakout rooms.**
  - We recommend that no more than 2-3 students are seated at one table with a mentor, this helps keep the relationship small and increases productivity. Our mentors are prepared to handle all project subjects, but if this becomes an apparent issue after the first few meetings it is fine to rearrange groups as you see fit.
    - 2 pairs
    - 1 group
    - 2-3 individual projects
- If you already have an idea of what students want to do their project on, or even their sect of science (engineering, biology, etc) we can organize, ahead of time, mentors in those strengths to mentor your students. However, it is not guaranteed with scheduling that mentors with strengths in these areas will be available.

\*Due to a constantly changing environment, it will be hard the first few weeks to be consistent with mentors. I will do my absolute best to keep students with the same mentor for as long as possible. Part of what makes SFA work is the relationship between mentors and mentees, a thorough understanding of the student and their project helps the program run smoothly.

### Once student ideas are complete

Students should ideally have additional class time to work on their projects during the off weeks in which SFA does not meet.

- Once a student idea has been locked down, mentors will work with students to learn about credible resources and gather background information.
- Additionally, experimentation (and other necessary project components: construction, programming) can also take place with a mentor.
  - Mentors should help students identify weaknesses in their project, and guide the student to also identify that issue and together propose a solution
  - Mentors are discouraged from just pointing out areas of improvement, the goal here is for students to reflect on their work and learn to think critically

### Final Touches

Occurring in the last few meetings before the school fair, meetings may become less frequent as necessary.

- Mentors and students can work together on the students board, although time might be better used for presentations. This can be assessed on a case by case basis.

### Science Fair and Beyond

Project should be completed before the school fair. If a student advances further, mentorship is still available but will be less frequent and focused on project refinement, not reconstruction.

### School Specific Supplementation

If your classroom has additional needs or interests, we are happy to work with you. Some of these ideas may include:

- A pre-presentation given by SFA mentors about Science Fair/Olympiad. Essentially an info session
- Presentations on the scientific method/drafting a project idea
- Class activities, such as completing a mini science project together
- A practice presentation to show students how a completed Science Fair Project will look
- Additional STEM mentoring